

ACC INTERVENTIONAL SCIENTIFIC COUNCIL: NEWS AND VIEWS

Maintenance of Certification in Interventional Cardiology Revisited

Jon C. George, MD,* George D. Dangas, MD†

Browns Mills, New Jersey; and New York, New York

In late October 2009, nearly 900 interventional cardiologists traded their coronary catheters for a keyboard and mouse to take the Maintenance of Certification (MOC) exam in Interventional Cardiology (IC) offered by the American Board of Internal Medicine (ABIM). Since the inception of the initial board certification exam in the U.S. in 1999, a large number of practicing interventional cardiologists were certified during the initial years by practice pathways outside of the formal Accreditation Council for Graduate Medical Education (ACGME)-accredited training programs (1). Since all board certification offered by ABIM expires after a 10-year period, the MOC exam was expected to have a large enrollment in 2009. Although recertification was possible for those interested during the period of 2005 to 2008, there was a rising trend each year at 14 (2005), 20 (2006), 68 (2007), and 211 (2008), peaking at 343 just in the spring of 2009.

The large number of anticipated MOC exam takers for IC prompted the topic of recertification as the first *JACC: Cardiovascular Interventions* News and Views column from the Interventional Scientific Council in June 2008 (1). The continued rise of recertification applicants expected this year, along with the anxiety provoked by recertification triggered the need to revisit the topic again.

Need for Recertification

Specialty board certification has been found to have a positive impact on performance, specifically in the realm of cardiology (2). But once certified, many physicians have questioned the need for a recertification examination, citing the lack of evi-

dence that MOC provides meaningful information about physician competence (3). However, recent data suggest that cognitive skills, as measured by a MOC examination, are associated with higher quality of care for patients (4). Moreover, public support for repeated cognitive testing has been strong, with almost 90% of patients surveyed believing that a physician should take an examination of knowledge periodically (5).

Steps to Recertification

The first step for recertification is for physicians to access the ABIM website (6) and register. The MOC program for IC required by ABIM for recertification includes verification of credentials and case volume, self-evaluation in medical knowledge and practice improvement, and a secure computer-based examination (7).

Candidates for the MOC program must possess a valid, unrestricted, and unchallenged medical license in the U.S., its territories, or Canada. Moreover, a current certification in Cardiovascular Disease must be held to apply for and maintain certification in IC. In addition, the MOC program in IC has procedural requirements verifying performance as primary operator, co-operator, or supervisor of 150 percutaneous coronary interventional cases in the 2 years before expiration of certification.

Self-evaluation for the MOC program requires earning a total of 100 points from 2 categories: medical knowledge and practice improvement. A minimum of 20 points must be earned from each category, and the total points can be accumulated at any time through the 10-year certification cycle.

Medical knowledge modules in IC are available in the form of web-based modules or simulations: web-based modules cover important aspects of the knowledge base within IC or provide annual updates highlighting recent, clinically relevant devel-

From the *Division of Cardiovascular Medicine, Deborah Heart and Lung Center, Browns Mills, New Jersey; and the †Columbia University Medical Center, New York, New York. Dr. Dangas serves as course director and faculty in several recertification preparatory and board review courses.

opments in IC; simulations allow hands-on practice and testing at simulators set up at various sites around the country and offered at specific national IC conferences. Each medical knowledge module provides 10 points, and simulation offers 20 points. Review of these modules with expert faculty is typically offered as focused sessions within the American College of Cardiology (ACC), Transcatheter Cardiovascular Therapeutics, and Society for Cardiovascular Angiography and Interventions annual sessions around the year. In addition, ACC jointly with the Society for Cardiovascular Angiography and Interventions has launched Catheterization Self-Assessment Program-3 (CathSAP-III), which offers 40 points toward MOC through completion of a dedicated multiple choice question home test. All these options can be chosen through the ABIM website; additionally, ABIM sends email reminders regarding upcoming live reviews of MOC modules during the aforementioned interventional conferences.

Practice improvement modules in IC are available in various classifications: ABIM Approved Quality Improvement Pathway, pertaining to cardiovascular risk; Communication, as subspecialists with referring physicians; Hospital-based patient care, relating to admissions for heart failure and myocardial infarctions; Preventive cardiology, in attempts to decrease hospital admissions; and Self-directed, using approved resources such as ACC's National Cardiovascular Data Registry or Door to Balloon Initiative, to report on group practice quality improvement projects. Each practice improvement module provides 20 to 40 points.

The MOC examination for IC is a computer-based test designed to evaluate the extent of the candidate's knowledge and clinical judgment in various content categories, including case management (25%), procedural techniques (25%), basic science (15%), pharmacology (15%), imaging (15%), and miscellaneous topics (5%). The examination is offered twice a year at select locations around the country in the spring and fall.

Of note, if one is due to recertify in both cardiovascular disease and IC, then the same 100 points will serve both purposes, and the only "extra" step will be the additional secure examination. Importantly, those IC practitioners who are seeking Vascular Medicine or Endovascular Therapy certification should seek the relevant process at the American Board of Vascular Medicine website (8).

Recertification Process Feedback

The ACC conducted an online survey of member cardiologists regarding the MOC process in June 2009 that included participation from 1,015 members. Fewer than

two-thirds of cardiology practices required that physicians maintain certification in IC. Although 65% of cardiologists had enrolled in the MOC program, only 20% had completed the process, and only 10% did not intend to enroll. Almost 60% of participating cardiologists reported that participation in the MOC program did not yield additional insights relevant to their practice. Most cardiologists wanted ACC to play a role in improving the MOC process and relied on ACC products, including board review courses and exam materials, to prepare for the examination.

Summary

The ABIM requires participation in the MOC program for recertification in IC. Although the process seems cumbersome, the necessary requirements can be easily managed by early enrollment in the MOC program. The ACC has responded to members' concerns over taking the board recertification exam and going through the MOC process by putting together a MOC toolkit (9), which includes resources for self-evaluation of medical knowledge and practice improvement. In addition, the ACC Annual Scientific Session offers several MOC sessions to assist in completing ABIM's medical knowledge modules. Further information regarding the MOC program for IC is available at the ABIM (7) and ACC/Cardiosource (9) websites.

Reprint requests and correspondence: Dr. George D. Dangas, Columbia University Medical Center, 161 Fort Washington Avenue, New York, NY 10032. E-mail: gd2140@columbia.edu.

REFERENCES

1. Dangas GD, Popma JJ. Recertification in Interventional Cardiology. *J Am Coll Cardiol Interv* 2008;1:3324.
2. Norcini JJ, Lipner RS, Kimball HR. Certifying examination performance and patient outcomes following acute myocardial infarction. *Med Educ* 2002; 36:853-9.
3. Grosch EN. Does specialty board certification influence clinical outcomes? *J Eval Clin Pract* 2006;12:473-81.
4. Holmboe ES, Wang Y, Meehan TP, et al. Association between maintenance of certification examination scores and quality of care for Medicare beneficiaries. *Arch Intern Med* 2008;168:1396-403.
5. Brennan TA, Horwitz RI, Duffy FD, et al. The role of physician specialty board certification status in the quality movement. *JAMA* 2004;292:1038-43.
6. American Board of Internal Medicine. Available at: <http://www.abim.org/default.aspx>. Accessed March 14, 2010.
7. ABIM Requirements for Maintenance of Certification. Available at: <http://www.abim.org/moc/requirements-for-MOC.aspx>. Accessed on February 27, 2010.
8. American Board of Vascular Medicine. Available at: <http://www.vascularboard.org/>. Accessed March 14, 2010.
9. MOC Toolkit. Available at: <http://www.cardiosource.com/moc/index.asp>. Accessed on February 27, 2010.